A How To Guide for Bootstrapping Innovation™

Following is a simple blueprint for Bootstrapping Innovation™ in your organization or network, identifying five points of leverage for accelerating and scaling up your innovation and Collective IQ capacity. These accelerators can be used to boost innovation within any innovation team or initiative tackling any important challenge or opportunity. In addition, organizations wishing to dramatically improve the ease, reach, and effectiveness of such teams and initiatives are encouraged to form a special innovation team focused on boosting Collective IQ capability, with a mandate to rigorously apply all five accelerators. This intentionality is designed to forge an Innovation Neural Network™ capable of ramping up your innovation capacity with a serious multiplier effect throughout the organization. Large organizations would benefit from a network of such teams, while smaller organizations might have one very small team, or designate one or two individuals to participate in another organization's team. All organizations can benefit from joining forces in an innovation alliance with others on this path.

1. **Focus on Capability: Especially Innovation / Collective IQ**
   - For breakthrough innovation focus on capability, rather than a specific tool or process, that addresses an important fundamental need or opportunity. I.e. are you in the telephone business, or communications business?
   - Drill down into sub-capabilities, and into potentially enabling tools and human elements to see the big picture and identify otherwise hidden opportunities for innovation;
   - For our purposes, we focus on boosting the Collective IQ capability as the point of greatest leverage for innovation; What is Collective IQ? Where to focus? How to improve exponentially? (see Why Collective IQ? below).

2. **Engage your Innovators: Innovation Networks**
   - Who has a stake in your initiative? Who should be part of the solution? Identify your key target customers, beneficiaries, champions, peers, providers, related initiatives, etc.; use the ABC Model to drill down into this capability and map out the relevant A, B, and C relationships (see also Know Your Customer); you will be engaging stakeholders vertically and horizontally on this map, connecting the dots to forge pathways in your Innovation Neural Network;
   - Add key stakeholders to your core team, and more broadly to your innovation network (see About NICs) – think inclusive, participatory and collaborative, unconstrained by organizational boundaries; start small, focused, then grow (see Making the Case below).

3. **Leverage your Collective IQ: Enhancing the DKE**
   - Establish a virtual venue for ongoing connectivity, share and exchange within and across your innovation team/network(s), including basic collaborative tools, processes, shared values, vision, protocols, methodologies, etc., plus anything your team is producing (#1 above) that applies;
   - This becomes your collective brain, aka dynamic knowledge/innovation ecosystem (DKE);
   - Drill down into the Collective IQ capability, paying special attention to the ease and quality of collaboration (CodIaK), as well as the ease and quality of capture, integration, organization,
immersion and exploitability of the emerging collective knowledge repository (DKR); this whole piece is a core enabler for boosting your Collective IQ and innovation capacity;

- Start simple, evolvable, open, with emphasis on *evolvable*; as resources permit, keep adding, evolving, continuously improving your DKE, stretching beyond business as usual (refer to our Dynamic Knowledge Initiative for ideas); this intentionality turns your network into an especially dynamic innovation network (or networked improvement community (NIC) in Doug's original parlance).

- Now you are engaged in boosting Collective IQ for your extended innovation network and your core team; this activates and energizes the central nervous system in your Innovation Neural Network, forging new pathways and vehicles for optimizing the collective memory, foresight, ingenuity, follow through, etc.

4. **Walk your Talk: Bootstrapping Leverage**

- If any part of your capability focus (#1 above) involves enhancing Collective IQ/innovation capacity, those products/services should be an integral part of your team's DKE, which means you are using your products/services to help leverage your Collective IQ; harnessing what you provide to become a faster, smarter provider is the essence of *bootstrapping* (see About Bootstrapping).

- As resources permit, be your own most demanding customer/practitioners, your most advanced pilot experiment, be the stress test, be model practitioners;

- If rigorous usage of what you provide increases your team's Collective IQ/innovation capacity, then this bootstrapping will activate a multiplier effect within your Innovation Neural Network (i.e. increased Collective IQ yields better products/services that further increase Collective IQ, etc., like compounding interest to your and your network);

- When your customers include innovation teams and networks whose Collective IQ increases as a result of using your products/services, your multiplier effect will be further amplified throughout your Innovation Neural Network;

- The more capabilities in your DKE that you are both user and provider of, the greater your bootstrapping leverage multiplier effect (i.e. the more of #1 you have integrated in #3, and the more of #3 that is provided by #1, the greater your bootstrapping amplification).

5. **Push the Frontier: Accelerating Co-Evolution**

- Adopt a pioneering attitude, you’re out on the frontier in a new paradigm, cultivating an adventurous, proactive, multi-disciplinary, experimental build-and-try innovation team, putting whatever is developed into use right away;

- Include explicit co-evolution of both experimental tools and practices in your pilot experiments to expand and accelerate your reach out on this frontier. Co-evolution will happen naturally out in the marketplace, very slowly, whereas pro-active co-evolution in robust experimental ecosystems in collaboration with your innovation network members (#2 above) can avoid lost opportunity costs by accelerating progress toward your envisioned results.

- Join forces with like-minded pioneers in a Networked Innovation Alliance (aka improvement alliance or "C Community").

As you keep expanding on these five accelerators, the dynamic knowledge environment facilitating your innovation team or network grows more and more enabling and robust, as does the emerging knowledge repository capturing your collective wisdom and learnings, serving as a vehicle for accelerative innovation, while your focus on Collective IQ, ABC networking, and bootstrapping the co-evolution are the catalysts.
The greatest point of leverage for your organization or network is to task a special innovation team focused on increasing Collective IQ and innovation capacity (#1 above), to network your organization's innovation teams/networks (#2 above), fielding an enabling DKE to facilitate engagement and follow through (#3), which can in turn be used by all participating innovation teams -- most notably this special core team (#4), co-evolving the human-tool capabilities of the innovation frontier (#5). This forges and energizes an *Innovation Neural Network™*, with a built-in reverberating amplifier multiplier effect, ramping up the capacity for innovation, continuous improvement, and Collective IQ throughout.

All this translates into faster, smarter more innovative pursuit of ever more complex, urgent problems and opportunities, which translates into rapidly increasing effectiveness, productivity, competitiveness, and success.

**Start Here**

A simple place to start is to fill out our [Bootstrapping Innovation Worksheet](http://dougengelbart.org) with a few colleagues from your innovation team/network, or your would-be innovation team/network. Read through the above together, discuss how it applies, referring to the Case Examples highlights (coming soon). As you fill out the Worksheet, keep in mind your ideal end target, your current situation, and steps you might take to get from here to there; this is your first pass of a work in progress. Network with others who have started down this path to gain more insight and expand your innovation network. If it's in your charter to apply these innovation accelerators in your innovation team/network, you can just start in any order that makes sense for your situation. Otherwise, find the innovation team/network whose charter this would fall under, or start your own; you can start informally meeting with key innovation buddies and work up to where you can officially form an innovation team for this pursuit.

**RESOURCES**

- Case examples and launch scenarios - coming soon.

- [Augmenting Society's Collective IQs](http://dougengelbart.org) - vision highlights, connecting the dots, makes the case for this strategic approach for accelerating the evolution of our Collective IQ to its highest potential. This is a one-pager bird's eye view with hotlinks to the detail on each concept - a great jumping off point.

- [About a Bootstrapping Strategy](http://dougengelbart.org) - more detail and pointers on this strategic approach.

- Why Collective IQ? - see [About Collective IQ](http://dougengelbart.org), [Why Collective IQ?](http://dougengelbart.org), [Why Collective IQ Matters](http://dougengelbart.org), and [Vision Highlights](http://dougengelbart.org)

- Making the Case - see highlights from SRI's [Five Disciplines of Innovation](http://dougengelbart.org), Patricia Seybold's [Key Principles in Outside Innovation](http://dougengelbart.org), and Tim Brown's [Change By Design](http://dougengelbart.org) for starters.

- Visit [http://dougengelbart.org](http://dougengelbart.org) for additional resources and background.